

REMARKS

The Office Action mailed July 3, 2007 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-20 are now pending in this application. Claims 1-7 stand rejected. Claims 8-20 are newly added. No additional fee is due for newly added Claims 8-20. No new matter has been added.

Applicant and the undersigned wish to thank Examiner Nguyen for the courtesies he extended in a telephonic conversation with Melissa Glauber on September 20, 2007. The Examiner advised Applicant that the abstract of the disclosure is objected to because the abstract repeats information in the title. This amendment has been made in consequence thereof.

The objection to the specification is respectfully traversed. Applicant has amended page 1, lines 12-29, page 2, lines 8-11, and the Title to address the issues raised in the Office Action. For at least the reasons set forth above, Applicant requests that the objection to the specification be withdrawn.

The rejection of Claims 1-7 under 35 U.S.C. § 112, second paragraph, is respectfully traversed. Applicant has amended Claims 1, 3, 6, and 7 to address the Section 112 rejections. Accordingly, Applicant respectfully requests that the Section 112, second paragraph, rejection of Claims 1-7 be withdrawn.

The rejection of Claims 1-7 under 35 U.S.C. § 101 as being directed to non-statutory subject matter is respectfully traversed.

The Examiner asserts beginning at page 5 of the Office Action that "the claims do not fall within one of the four enumerated categories of patentable subject matter recited in section 101 (process, machine, manufacture or composition of matter)." Applicant respectfully traverses this assertion, and submits that the claims of the present patent application are directed to practical applications in the technological arts. "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. "Any sequence of operational

steps can constitute a process within the meaning of the Patent Act so long as it is part of the technological arts.” In re Musgrave, 431 F.2d 882 (CCPA 1970). Moreover, computers should be considered within the technological arts for the purposes of Section 101, regardless of the uses to which they are put. In re Benson, 169 USPQ 548 (CCPA 1971).

Nonetheless, in order to expedite prosecution, Applicant has amended independent Claim 1 to recite a system including a multi-tier application architecture having a middle tier. Applicant respectfully submits that a system is a useful process that is considered to be within “the technological arts.” Accordingly, Applicant submits that Claim 1, as amended, satisfies the requirements of 35 U.S.C. § 101.

Claims 2-7 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-7 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 2-7 likewise satisfy the requirements of Section 101.

For at least the reasons set forth above, Applicant respectfully requests that the Section 101 rejection of Claims 1-7 be withdrawn.

The rejection of Claims 1-21 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,146,617 to Mukundan et al. (hereinafter referred to as “Mukundan”) is respectfully traversed.

Initially, Applicant respectfully submits that, at the time the Office Action was mailed, only Claims 1-7 were pending. Claims 8-20 are newly added herein. Accordingly, Applicant respectfully requests that the Section 102 rejection of Claims 8-21 be withdrawn.

Mukundan describes a system that includes a set of browser-side objects (502) running on a browser (4402) residing on a client (602), and a remote procedure call (RPC) mechanism (528) and a notification mechanism (530) that facilitate communication and synchronization between the browser-side objects (502) and a set of server-side objects (504) managed by an object manager (OM) running on a server (604). The system also includes a cache (4416) on the client (602) to store layouts of views, wherein each view is a display panel having a particular arrangement of applets. The client (602) receives a request from a user to switch to a view, and to obtain a layout of the view from the server (604) using the RPC mechanism (528) and the notification mechanism (530). The client (602) stores the

layout of the view in the cache (4416) if the layout of the view has not been cached. A server-side applet or business component can respond (1420 or 1515) to a RPC invoke method by setting a status flag indicating "continue," "completed," "new page," and/or "error." When the status flag indicates "error," an error page is displayed. To avoid timing out, the server (604) informs the client (602) that a request may include a long-running and/or time consuming operation.

Notably, Mukundan, at column 8, line 42 to column 11, line 5, does not describe nor suggest each an every element of Claim 1, as is asserted on page 6 of the Office Action. Applicant respectfully traverses such an assertion and, rather, submits that at column 8, line 42 to column 11, line 5, Mukundan describes various types of services and tools within the framework. Further, within the cited passage, Mukundan describes that an infrastructure (500) supporting a interactive web client (205) and a mobile web client (210) includes a plurality of objects (502, 504, 506, 508, 510, 512, 514, 516, 518, 520, and 522), wherein a set of objects (502) can be dynamically created to mimic another set of objects (504). At least some of the objects (520, 522, 516, and 518) are temporary entities and are replaced when a page refresh occurs. However, Mukundan does not describe nor suggest, for example, a framework configured to: when execution of an object fails, repeatedly refresh the object within a limited number of retries; when an object refresh succeeds, return the object to a cache and again allow a middletier to execute the object; and, when an object refresh does not succeed within a limited number of retries, quit an application in fail-safe way. Accordingly, for at least this reason, Applicant respectfully requests that the Section 102 rejection of Claims 1-7 be withdrawn.

Because no citations are made to Mukundan that show where each and every element of Claim 1 is described therein, in the event the Office maintains its rejection of Claims 1-7 in view of Mukundan, Applicant respectfully requests that the Office clearly delineate and point out the features disclosed by Mukundan that the Office believes corresponds to at least each and every feature recited in Claim 1.

Claim 1 recites a system including a multi-tier application architecture having a middletier, said system comprising "a framework to mediate between an application and the middletier, wherein the framework is configured to: allow the middletier to execute an object fetched by the application from a cache; when the execution of the object fails, repeatedly refresh the object within a limited number of retries; when the object refresh succeeds, return

the object to the cache and again allow the middletier to execute the object; and when the object refresh does not succeed within the limited number of retries, quit the application in fail-safe way.”

Mukundan does not describe nor suggest a system including a multi-tier application architecture having a middletier as recited in Claim 1. More specifically, Mukundan does not describe nor suggest a system that includes a framework configured to, when execution of an object fails, repeatedly refresh the object within a limited number of retries. Furthermore, Mukundan does not describe nor suggest a system that includes a framework configured to, when an object refresh succeeds, return the object to a cache and again allow a middletier to execute the object. Moreover, Mukundan does not describe nor suggest a system that includes a framework configured to, when an object refresh does not succeed within a limited number of retries, quit an application in fail-safe way. Rather, in contrast to the present invention, Mukundan describes a server-side applet or business component that responds to a remote procedure call invoke method by setting a status flag to indicate “error” and by displaying an error page.

Accordingly, for at least the reasons set forth above, Claim 1 is submitted to be patentable over Mukundan.

Claims 2-7 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-7 are considered in combination with the recitations of Claim 1, Applicant submits that dependent Claims 2-7 likewise are patentable over Mukundan.

For at least the reasons set forth above, Applicant respectfully requests that the Section 102 rejection of Claims 1-21 be withdrawn.

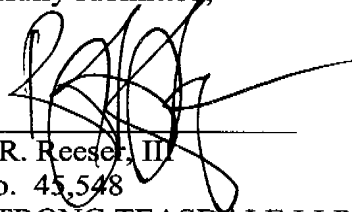
Newly added Claim 8 depends from independent Claim 1, which Applicant submits is patentable over the cited art. For at least the reasons set forth above, Applicants respectfully submit that Claim 8 is also patentable over the cited art.

Claim 9 is a newly added independent claim, which Applicant submits is patentable over the cited art. Newly added Claims 10-15 depend from newly added independent Claim 8. For at least the reasons set forth above, Applicant respectfully submits that Claims 10-15 are also patentable over the cited art.

Claim 16 is a newly added independent claim, which Applicant submits is patentable over the cited art. Newly added Claims 17-20 depend from newly added independent Claim 16. For at least the reasons set forth above, Applicant respectfully submits that Claims 17-20 are also patentable over the cited art.

In view of the foregoing amendment and remarks, all the claims are now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'R. Reeser, III', written over a horizontal line.

Robert R. Reeser, III
Reg. No. 45,548
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070